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      4 <110> APPLICANT: German, Michael S.
      5       Lin, Joseph
      7 <120> TITLE OF INVENTION: PRODUCTION OF PANCREATIC ISLET CELLS
      8       AND DELIVERY OF INSULIN
     13 <130> FILE REFERENCE: UCSF-129CIP
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/817,360
C--> 15 <141> CURRENT FILING DATE: 2001-03-20
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     16 <151> PRIOR FILING DATE: 2000-03-24
     18 <150> PRIOR APPLICATION NUMBER: 60/128,180
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     33 tctaacttgc agttaaataa atcaggcaag gctggcctat gaggcagaca agtgtgaaga     180
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     36 cttgaatgga cagtggttcc ccttgcctag aaaatgggac cattatttct tttctaatct     360
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     38 aaaaaaaatg ttttctccca aatcaaggag cagtagctgg tgcaagggaa aatctagggc     480
     39 taggagtctt aagatatgac ttctatgtgg ttctgataga acttgctggg tgaccttgag     540
     40 agagtcactc cccctctctg ggccttgatt ttttcatctt taaagaaggc ctcaaattcc     600
     41 cattcttatg agaagaagac aagctcctag tgagtggtga cctaagggag cagctgcagc     660
     42 aaaatgctaa cctgacagtc ccagatggtc cctttattgg ttctgaccct ggtctcaggc     720
     43 ttcatttccc cacagcaagg gaaggagcct gctcacagag caccagctaa gatcagcagg     780
     44 accgcgccac acccccgccc agtcctagag ccccccctc gctggttcct gagcatacca     840
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     46 gggcagactc acagacctac ctcatcccct caccccaccc tacagtctcg aagtcgggtc     960
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     56 aaaggaacgc ttgagcccag gagttcgaga ccatcctggg caacaaagca agaccgcccc    1560
     57 tcaccccata caaaataaaa atacaaataa attagccggg cacagtggcg catgcctgta    1620
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62 gggatactat ctacaagctg tagtaggctt gtagtaatgg aatgtccgct tgaggggtcc 1920
63 ccgcacagcc aaccccggcc tctggagtgg gatctatggg ggtggggttc taagcgcctc 1980
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Ala Glu Glu Gly Gly Cys Arg Gly Ala Pro Arg Lys Leu Arg Ala Arg
    50                  55                  60
Arg Gly Gly Arg Ser Arg Pro Lys Ser Glu Leu Ala Leu Ser Lys Gln
65                  70                  75                  80
Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met
                85                  90                  95
His Asn Leu Asn Ser Ala Leu Asp Ala Leu Arg Gly Val Leu Pro Thr
            100                 105                 110
Phe Pro Asp Asp Ala Lys Leu Thr Lys Ile Glu Thr Leu Arg Phe Ala
        115                 120                 125
His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His
    130                 135                 140
Ser Leu Tyr Ala Leu Glu Pro Pro Ala Pro His Cys Gly Glu Leu Gly
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Ser Pro Gly Gly Ser Pro Gly Asp Trp Gly Ser Leu Tyr Ser Pro Val
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<210> SEQ ID NO: 4
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            20                  25                  30
Asn Ser Thr Pro Pro Ser Pro Thr Leu Ile Pro Arg Asp Cys Ser Glu
        35                  40                  45
Ala Glu Val Gly Asp Cys Arg Gly Thr Ser Arg Lys Leu Arg Ala Arg
    50                  55                  60
Arg Gly Gly Arg Asn Arg Pro Lys Ser Glu Leu Ala Leu Ser Lys Gln
65                  70                  75                  80
Arg Arg Ser Arg Arg Lys Lys Ala Asn Asp Arg Glu Arg Asn Arg Met
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Input Set : A:\SeqList for UCSF-129CIP.txt
Output Set: N:\CRF3\04052001\I817360.raw

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216 His Asn Tyr Ile Trp Ala Leu Thr Gln Thr Leu Arg Ile Ala Asp His
217 130 135 140
218 Ser Phe Tyr Gly Pro Glu Pro Pro Val Pro Cys Gly Glu Leu Gly Ser
219 145 150 155 160
220 Pro Gly Gly Gly Ser Asn Gly Asp Trp Gly Ser Ile Tyr Ser Pro Val
221 165 170 175
222 Ser Gln Ala Gly Asn Leu Ser Pro Thr Ala Ser Leu Glu Glu Phe Pro
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230 <211> LENGTH: 23
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241 <211> LENGTH: 23
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248 <400> SEQUENCE: 6
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251 <210> SEQ ID NO: 7
252 <211> LENGTH: 16
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:
257 <223> OTHER INFORMATION: oligonucleotide primer
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270 <400> SEQUENCE: 8
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273 <210> SEQ ID NO: 9

VERIFICATION SUMMARY DATE: 04/05/2001
PATENT APPLICATION: US/09/817,360 TIME: 12:14:05

Input Set : A:\SeqList for UCSF-129CIP.txt
Output Set: N:\CRF3\04052001\I817360.raw

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L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date